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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,291	03/04/2002	Leonel Ernesto Enriquez	50136SE1764TL	6622

27975 7590 03/18/2004

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EXAMINER	
BRINEY III, WALTER F	

ART UNIT	PAPER NUMBER
2644	3

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/090,291	ENRIQUEZ ET AL.	
	Examiner	Art Unit	
	Walter F Briney III	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 August 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings were received on 27 August 2002. These drawings are accepted by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Takato et al. (US Patent 4,631,366).

Claim 15 is limited to **a circuit arrangement for limiting the DC voltage applied to a tip and ring amplifiers of a subscriber line interface circuit (SLIC)** (figure 6, elements A_0, A_1), **each having a first polarity input** (figure 6, element A_0/A_1, plus terminal) **thereof coupled to a first current flow path to which a DC input voltage is coupled**. Takato discloses **a first current source** (figure 6, element Tr_0) **that is operative to supply, to a second polarity input node of said tip amplifier** (figure 6, element A_0, minus terminal), **a first current derived in accordance with that flowing through said first current flow path** (figure 6, path from Ra_0 through Ra_1). Takato discloses **a second current source** (figure 6, element Tr1) **that is operative to supply, to a second polarity input node of said ring amplifier** (figure 6, element A_1,

minus terminal), **a second current derived in accordance with that flowing through said first current flow path** (figure 6, path from Ra_0 through Ra_1). Takato discloses **a voltage regulator** (figure 6, element IV) **coupled with said first current flow path and being operative to regulate the voltage at said first polarity input of said tip/ring amplifier** (figure 6, elements A_0/A_1, plus terminal) **to a regulated voltage value Vreg** (i.e. $-V_{BB}/2$) (column 5, lines 65-67), **so that the magnitudes of said first and second currents supplied by said first and second current sources, respectively, are based upon said regulated voltage value Vreg** (i.e. $-V_{BB}/2$), **irrespective of said DC input voltage** (figure 6, element $-V_{BB}$) **exceeding said regulated voltage value Vreg** (column 5, line 61-column 6, line 5). Therefore, Takato anticipates all limitations of the claim.

Claim 16 is limited to **the circuit arrangement according to claim 15**, as covered by Takato. Takato discloses **first and second low-pass filters** (figure 6, element Rs_0, C_0 and Rs_1 C_1) **respectively coupled with said first and second current sources** (figure 6, elements Tr_0 and Tr_1) **and being operative to pass DC supply energy** (i.e. DC blocking capacitors prevent DC from shunting to ground) (column 6, lines 40-41) **and prevent noise** (i.e. differential-mode voltage introduced into battery $-V_{BB}$) **from being introduced into the voice paths of said tip and ring amplifiers** (column 6, line 26-column 7, line 15). Therefore, Takato anticipates all limitations of the claim.

Claim 17 is limited to **the circuit arrangement according to claim 15**, as covered by Takato. Takato discloses **a voltage divider** (figure 6, elements Ra_0, Rb_0,

Rb_1, Ra_1) **to an input terminal of which said DC input voltage is applied** (figure 6, element $-V_{BB}$). Takato also discloses **a voltage dividing node** (figure 6, element M_2) **of which said first polarity inputs of said tip and ring amplifiers are coupled** (figure 6, elements A_0/A_1, plus terminals). Takato discloses that **said voltage regulator** (figure 6, element IV) **is coupled to said input terminal of said voltage divider** (figure 6, element IV connected to $-V_{BB}$ through Rb_1 and Ra_1). Therefore, Takato anticipates all limitations of the claim.

Claim 18 is limited to **the circuit arrangement according to claim 17**, as covered by Takato. Takato discloses **first and second current sources** (figure 6, elements Tr_0 and Tr_1) that produce **a first and second current** and are controlled by amplifiers A0 and A1, the amplifiers are controlled by currents between M_2 (i.e. **voltage dividing node**), Ground (i.e. **reference node**), and $-V_{BB}$. Therefore, Takato anticipates all limitations of the claim.

Claim 19 is limited to **the circuit arrangement according to claim 15**, as covered by Takato. Takato discloses **a voltage divider** (figure 6, elements Ra_0, Rb_0, Rb_1, Ra_1) **to an input terminal of which said DC input voltage is applied** (figure 6, element $-V_{BB}$). Takato also discloses **a voltage dividing node** (figure 6, element M_2) **of which said first polarity inputs of said tip and ring amplifiers are coupled** (figure 6, elements A_0/A_1, plus terminals). Takato discloses that **said voltage regulator** (figure 6, element IV) **is coupled to said voltage dividing node of said voltage divider** (figure 6, element IV connected to M_2). Therefore, Takato anticipates all limitations of the claim.

Claim 20 is essentially the same as claim 18 and is rejected for the same reasons.

Claims 1-6 are essentially the same as claims 15-20, respectively, and are rejected for the same reasons.

Claims 8-13 are essentially the same as claims 15-20, respectively, and are rejected for the same reasons.

Claim 14 is limited to **the circuit arrangement according to claim 13**, as covered by Takato. **further including a low-pass filter** (figure 6, element Rs_0, C_0) **coupled with said current source** (figure 6, element Tr_0) **and being operative to pass DC supply energy** (i.e. DC blocking capacitors prevent DC from shunting to ground) (column 6, lines 40-41) **and prevent noise** (i.e. differential-mode voltage introduced into battery $-V_{BB}$) **from being introduced into the voice path of said tip/ring amplifier** (column 6, line 26-column 7, line 15). Therefore, Takato anticipates all limitations of the claim.

Claim 7 is essentially the same as claim 14 and is rejected for the same reasons.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F Briney III whose telephone number is 703-305-0347. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WFB
3/12/04

MINSUN OH HARVEY
PRIMARY EXAMINER